

a dishwashing operation, and a controller for one of controlling an operating function effecting a switching on of the dishwasher, controlling an operating function effecting a switching off of the dishwasher, and selecting operational functions of the dishwasher, and the controller including a touch-sensitive surface with switching functions allocated to an operating function. The switching function of the touch-sensitive surface is actuatable by relatively light touching contact and the relevant operating function is thereby respectively switched off, switched on, or selected.

A second exemplary embodiment, as defined by, for example, independent claim 26 is directed to a dishwasher that includes a controller that controls the operation of the dishwasher, and a touch-sensitive user interface in communication with the controller that is responsive to a change in an electromagnetic field.

In contrast to the conventional dishwasher, an exemplary embodiment of the claimed invention includes a controller with a touch-sensitive surface that is actuatable by relatively light touching contact (claim 11); and a touch-sensitive user interface in communication with the controller that is responsive to a change in an electromagnetic field (claim 26). In this manner, the present invention improves ease of operation and is relatively unaffected by wear and contamination.

The Oyler et al. reference

The Office Action rejects claims 11 and 13 under 35 U.S.C. § 102(b) as allegedly being unpatentable over the Oyler et al. reference. Applicants respectfully traverse this rejection.

None of the applied references teaches or suggests the features of the claimed invention including a controller with a touch-sensitive surface that is actuatable by relatively light touching contact. As explained above, this feature is important for improving ease of operation and reducing wear and contamination.

Rather, the Oyler et al. reference discloses a control panel 66 that includes an electronic membrane switch assembly. As pointed out by the Oyler et al. reference such membrane switches are well known. Membrane switches require the use of a substrate

that flexes under pressure in order to contact another underlying substrate. In other words, a user of a membrane switch must exert pressure on the touch surface in order to cause the substrate to flex and actuate.

In stark contrast, an exemplary embodiment of the present invention is actuatable merely by relatively light touching contact. In other words, no pressure needs to be exerted at all by the user.

The Office Action attempts to avoid providing patentable weight to a structural feature of the claim, merely because such structural feature is described using functional language. There is nothing inherently wrong with defining some part of an invention in functional terms. A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in which it is used. (M.P.E.P. § 2173.05(g)). In the present instance, the claim requires a touch-sensitive surface having a structure which is actuatable by a relatively light touching contact. The failure by the Patent Office to provide this feature with patentable weight is improper.

Applicants respectfully request withdrawal of this rejection.

The Oyler et al. reference in view of the Kavanaugh et al. reference

The Office Action rejects claims 12 and 26 under 35 U.S.C. §103(a) as allegedly being unpatentable over the Oyler et al. reference in view of the Kavanaugh et al. reference. Applicants respectfully traverse this rejection.

The Office Action admits that the Oyler et al. reference does not teach or suggest the features of the claimed invention including a touch-sensitive user interface in communication with the controller that is responsive to a change in an electromagnetic field. The Office Action relies upon the Kavanaugh et al. reference in an attempt to remedy the deficiencies of the Oyler et al. reference.

The Kavanaugh et al. reference appears to disclose a wallet for a personal information device which may include a touchpad 80 which is based upon electrical capacitance and which does not require pressure or direct contact.

The Office Action alleges that it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the touch controller of the Kavanaugh et al. reference in the dishwasher door assembly that is disclosed by the Oyler et al. reference “to have yield the predictable result of controlling the user selected functions as the user touches the controller.” Applicants respectfully submit that such a conclusory statement is insufficient to provide a *prima facie* case for obviousness because the Office Action fails to provide an adequate rationale for combining the art as required by KSR International v. Teleflex Inc. 82 U.S.P.Q.2d 1385 (2007).

“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” (In re Kahn, 441 F.3d 977, 988 (CA Fed. 2006) cited with approval in KSR.)

The Office Action simply provides absolutely no hint of any articulated reasoning with any rationale underpinning to support a legal conclusion of obviousness. As such, the Office Action fails to present a *prima facie* case for obviousness.

The Office Action has provided no articulated reasoning to combine the teachings and suggestions of the Oyler et al. reference with the Kavanaugh et al. reference to arrive at the claimed invention, except from using Applicants’ own invention and disclosure as a template and through hindsight reconstruction of Applicants’ claims.

Moreover, Applicants respectfully submit that one of ordinary skill in the art would not have combined the teachings of the Kavanaugh et al. reference with the Oyler et al. reference because the references are directed to completely different and unrelated problems.

The Oyler et al. reference is concerned with the problem of providing an escutcheon that is separately molded from the remainder of the dishwasher door and, therefore, increasing the complexity of assembly and the cost of manufacture.

In stark contrast, the Kavanaugh et al. reference is directed to the completely different and unrelated problem of electronic devices becoming smaller in size which

adversely impacts their ease of operation due to, for example, reduced-sized keys, reduced-size displays and/or reduced number of keys.

One of ordinary skill in the art who was concerned with the problem of providing an escutcheon that is separately molded from the remainder of the dishwasher door and, therefore, increasing the complexity of assembly and the cost of manufacture of a dishwasher as the Oyler et al. reference is concerned would not have referred to the Kavanaugh et al. reference, and vice-versa, because the Kavanaugh et al. reference is directed to the completely different and unrelated problem of electronic devices becoming smaller in size which adversely impacts their ease of operation due to, for example, reduced-sized keys, reduced-size displays and/or reduced number of keys. Thus, these references would not have been combined.

Applicants respectfully request withdrawal of this rejection.

The Oyler et al. reference in view of the Brueggemann et al. reference

The Office Action rejects claims 14 and 17-25 under 35 U.S.C. §103(a) as allegedly being unpatentable over the Oyler et al. reference in view of the Brueggemann et al. reference. Applicants respectfully traverse this rejection.

None of the applied references teaches or suggests the features of the claimed invention including a controller with a touch-sensitive surface that is actuatable by relatively light touching contact as recited by independent claim 11. This feature is important for improving ease of operation and reducing wear and contamination.

As explained above, the Oyler et al. reference clearly does not teach or suggest this feature.

The Brueggemann et al. reference does not remedy the deficiencies of the Oyler et al. reference.

Rather, the Brueggemann et al. reference discloses using “pressure-sensitive sensors 4, i.e. piezosensors 4” (col. 2, lines 64-65). Piezosensors require the application of pressure in order to actuate, thus, the term “pressure-sensitive.”

In stark contrast, an exemplary embodiment of the present invention is actuatable merely by relatively light touching contact. In other words, no pressure needs to be exerted at all by the user.

Additionally, none of the applied references teaches or suggests the features of the claimed invention, as recited by, for example, dependent claim 12 including a touch-sensitive surface of a controller that reacts to a change in an electromagnetic field.

Indeed, the Office Action does not allege that any of the applied references teaches or suggests this feature.

Further, none of the applied references teaches or suggests the features of the claimed invention including a controller with a touch-sensitive surface that is controllably illuminated in steps as recited by claims 24 and 27. The Office Action cites column 3, line 1 – column 4, line 45 of the Brueggemann et al. reference in an attempt to support the allegation that the Brueggemann et al. reference discloses this feature. However, contrary to this allegation, column 3, line 1 – column 4, line 45 does not teach or suggest anything at all regarding controllably illuminating a touch-sensitive surface in steps as recited by claims 24 and 27.

Applicants respectfully request withdrawal of this rejection.

The Oyler et al. reference in view of the Brueggemann et al. reference and in further view of the Neugass reference

The Office Action rejects claims 15 and 21 under 35 U.S.C. § 103(a) under 35 U.S.C. §103(a) as allegedly being unpatentable over the Oyler et al. reference in view of the Brueggemann et al. reference and in further view of the Neugass reference.

Applicants respectfully traverse this rejection.

None of the applied references teaches or suggests the features of the claimed invention including a controller with a touch-sensitive surface that is actuatable by relatively light touching contact as recited by independent claim 11. This feature is important for improving ease of operation and reducing wear and contamination.

As explained above, the Oyler et al. reference and the Brueggemann et al. reference does not teach or suggest this feature.

The Neugass reference does not remedy the deficiencies of the Oyler et al. reference and the Brueggemann et al. reference.

Indeed, the Office Action does not allege that the Neugass reference teaches or suggests this feature.

Applicants respectfully request withdrawal of this rejection.

The Oyler et al. reference in view of the Anderson et al. reference and in further view of the Neugass reference

The Office Action rejects claims 16 and 22 under 35 U.S.C. § 103(a) under 35 U.S.C. §103(a) as allegedly being unpatentable over the Oyler et al. reference in view of the Anderson et al. reference and in further view of the Neugass reference. Applicants respectfully traverse this rejection.

None of the applied references teaches or suggests the features of the claimed invention including a controller with a touch-sensitive surface that is actuatable by relatively light touching contact as recited by independent claim 11. This feature is important for improving ease of operation and reducing wear and contamination.

As explained above, the Oyler et al. reference and the Neugass reference does not teach or suggest this feature.

The Anderson et al. reference does not remedy the deficiencies of the Oyler et al. reference and the Neugass reference.

Indeed, the Office Action does not allege that the Anderson et al. reference remedies these deficiencies.

Applicants respectfully request withdrawal of this rejection.

The Oyler et al. reference in view of the Kavanaugh et al. reference and in further view of the Brueggemann et al. reference

The Office Action rejects claim 27 under 35 U.S.C. § 103(a) under 35 U.S.C. §103(a) as allegedly being unpatentable over the Oyler et al. reference in view of the Kavanaugh et al. reference and in further view of the Brueggemann et al. reference. Applicants respectfully traverse this rejection.

As explained above, the Office Action again fails to present a *prima facie* case for obviousness by failing to provide an adequate rationale for combining the art as required by KSR International v. Teleflex Inc. 82 U.S.P.Q.2d 1385 (2007).

Further, one of ordinary skill in the art at the time the invention was made would not have combined the Brueggemann et al. reference with the Oyler et al. reference and the Kavanaugh et al. reference because the references are directed to completely different and unrelated problems.

The Brueggemann et al. reference is concerned with the problem of household appliance control surfaces having perforations which make the surfaces difficult to clean.

One of ordinary skill in the art who was concerned with the problem of providing an escutcheon that is separately molded from the remainder of the dishwasher door and, therefore, increasing the complexity of assembly and the cost of manufacture of a dishwasher as the Oyler et al. reference is concerned or who was concerned with the problem of electronic devices becoming smaller in size which adversely impacts their ease of operation due to, for example, reduced-sized keys, reduced-size displays and/or reduced number of keys as the Kavanaugh et al. reference was concerned would not have referred to the Brueggemann et al. reference, and vice-versa, because the Brueggemann et al. reference is directed to the completely different and unrelated problem of household appliance control surfaces having perforations which make the surfaces difficult to clean. Thus, these references would not have been combined.

Applicants respectfully request withdrawal of this rejection.